What is claimed is:

1.   An enterprise storage system for performing a file level backup operation on data using a mirror disk and a primary disk, individual files of data being backed up from the mirror disk to a backup storage media while a database application on a host system can freely read to and write from a database stored on the primary disk after a quiesce period which occurs as part of the file level backup operation, said system comprising:

a primary disk;

a mirror disk;

a file level mirrored backup portion, operable to initiate a file by file backup of data from said mirror disk to a backup storage device;

a synchronizer to synchronize data from said primary disk to said mirror disk upon an initiation of a file level mirrored backup process by said file level mirrored backup portion;

a database quiesce mechanism, operable after said synchronizer synchronizes said data from said primary disk to said mirror disk, to quiesce read and write interactions between said database application and said primary disk;

a discovery and prepare mechanism operable after quiescing of the read and write interactions to conduct discovery and prepare phases of a file by file mirrored backup operation;

a backup and cleanup mechanism to backup certain identified files from said mirror disk to said sequential storage media after completion of said discovery and prepare phases;

a split mechanism operable to split said mirror disk from said primary disk before backing data files up from said mirror disk to said sequential storage media;

22

an extent mapping mechanism to perform extent mapping on files to be backed up in a given backup session before said split mechanism splits said mirror for the same given backup session;

2. The system according to claim 1, wherein said backup storage device comprises sequential storage media.

3. The system according to claim 2, wherein said backup storage device comprises a tape storage device.

4. The system according to claim 3, wherein the quiescing of read and write interactions comprises freezing the database application.

5. The system according to claim 3, wherein the quiescing of read and write interactions comprises putting the database application in a hot backup state and maintaining a redo log during continued read and write interactions.

6. The system according to claim 1, further comprising an extent map check and update mechanism to check, after said split mechanism splits said mirror for the same given backup session, whether any files have been updated in a manner so as to require additional or revised extent map information.

7. The system according to claim 1, wherein said extent mapping mechanism performs extent mapping before said database quiesce mechanism quiesces the read and write interactions for the same given backup session.

8. The system according to claim 1, said mirror disk comprising memory media contained within a same enterprise storage platform as said primary disk.

23

9. The system according to claim 1, further comprising an unquiesce mechanism to unquiesce the database application after said mirror is split for the same given backup session.

10. The system according to claim 9, wherein said unquiesce mechanism unquiesces the database application after said extent map check and update mechanism completes a check and update operation in the same given backup session.

11. The system according to claim 1, further comprising a backup and clean up mechanism operable to perform backup and cleanup processes for the same given backup session.

12. The system according to claim 11, wherein said backup and cleanup processes include writing given identified files to sequential storage in logical order in terms of a logical file identification scheme used by said host system.

24